CLAIMS:

1. Device for discharge or outfeed of a pasty product, preferably foodstuff, from a container,

wherein the discharge of the product (2) from the container (3) is accomplished by imparting a triggering movement to a trigger (6), said triggering movement being transferred to a piston means (11) such that said piston means (11) is brought to perform a discharge movement in a discharge direction (F) for discharge or outfeed of the product (2) from the container (3),

c h a r a c t e r i z e d i n

that at least one retraction or withdrawal means (24) is provided for imparting to the piston means (11) a retrac-

tion movement in a retraction direction (R) opposite to the discharge direction (F), such that the pressure from the piston means (11) against the container (3) is relieved for accomplishing non-drop operation after discharge,

that at least one stroke setting or stroke determining means (30) is provided for determining the stroke of the piston means (11) and thereby, the dose volume during each discharge or outfeed of product (2) from the container (3), and

that a stroke setting means (30) for determining a stroke of the piston means (11) is replaceably provided on said piston means (11) such that it can be replaced by another stroke setting means (30) for determining or setting another stroke.

2. Device according to claim 1, characterized in that the retraction means (24) cooperates with the piston means (11) with such friction that it can bring along or move the piston means (11) in the retraction direction (R).

3. Device according to claim 1 or 2, characterized in

that the retraction means (24) comprises a sleeve-like member (25) which is threaded onto a piston rod (12) of the piston means (11),

that the retraction means (24) further includes two arms (26) which extend in a forward direction from the sleeve--like member (25) and are located on opposite sides of the piston rod (12), and

that the arms (26) at the front are connection with each other through a front member (27) which is threaded onto the piston rod (12).

4. Device according to any preceding claim, c h a r a c - t e r i z e d i n that the stroke setting means (30) is provided to determine the stroke of the piston means (11) by stopping the retraction movement of the piston means (11) in the retraction direction (R).

5. Device according to any preceding claim, c h a r a c - t e r i z e d i n that the stroke setting means (30) is replaceably provided on the piston means (11) such that a stroke setting means (30) which is adapted for a stroke of the piston means (11) is replaceable by a stroke setting means (30) which is adapted for another stroke of the piston means (11).

6. Device according to any preceding claim, c h a r a c - t e r i z e d i n that the stroke setting means (30) is a slotted sleeve (31) which can be threaded onto a piston rod (12) of the piston means (11) from a lateral direction and which is provided such that the length (L) thereof determines the stroke of the piston means (11).

7. Device according to any preceding claim, c h a r a c - t e r i z e d i n

that the stroke setting means (30) and the retraction means (24) are provided on the piston means (11) such that the stroke setting means (30), in the discharge direction (F), is located behind the retraction means (24), and

that the stroke setting means (30) is provided to limit the stroke of the piston means (11) by limiting the retraction movement thereof in the retraction direction (R) by indirect or direct cooperation with a body (4) of the

discharge device (1) and by the stroke setting means (30) determining the length of the movement of the retraction means (24) in the retraction direction (R).

8. Device according to any preceding claim, c h a r a c - t e r i z e d i n

that at least one retraction stop means (32) is provided on the piston means (11) behind the stroke setting means (30), seen in the discharge direction (F),

that the retraction stop means (32) cooperates with the piston means (11) with such friction that it is brought along therewith in the discharge and retraction directions (F, R) and is movable between a rear and a front contact surface (39, 40),

that the distance (T) between the rear and front contact surfaces (39, 40) corresponds or substantially corresponds with an idle movement of the piston means (11) in the discharge direction (F), at which idle movement the piston means (11) is reset after a preceding discharge movement for subsequent discharge of product (2) from the container (3), and

that the retraction stop means (32), when engaging the rear contact surface (39), stops the retraction movement of the stroke setting means (30), the retraction means (24) and the piston means (11) in the retraction direction (R).

9. Device according to claim 8, c h a r a c t e r i - z e d i n

that the retraction stop means (32) has the shape of a sleeve (37) which is threaded onto a piston rod (12) of the piston means (11) and which with friction cooperates therewith, and

that the rear and front contact surfaces (39, 40) are defined by a body (4) of the discharge device (1).

10. Device according to any preceding claim, c h a r a c t e r i z e d i n that a gripping appliance (19) is provided to be affected by the trigger (6) such that it is brought to grasp the piston means (11) for transfer of the triggering movement (A) of the trigger (6) to the piston means (11) for imparting thereto a discharge movement in the discharge direction (F).

11. Device according to claim 10, c h a r a c t e r i z e d i n that the gripping appliance (19) and the retraction means (24) cooperate with each other such that the retraction means (24) can pull the gripping appliance (19) in the retraction direction (R) relative to the piston means (11).

12. Device according to claim 11, c h a r a c t e r i z e d i n

that the retraction means (24) has contact surfaces (28, 29) between which the gripping appliance (19) is provided and through which the retraction means (24) can cooperate with the gripping appliance (19), said contact surfaces (28, 29) having convex arcuate shape relative to the gripping appliance (19), and

that the arcuate shape of the contact surfaces (28, 29) constitute parts of a circular arc, the centre of which lies on or close to a geometric centre line (CL) which extends along a piston rod (12) of the piston means (11).

13. Device according to claim 11 or 12, c h a r a c t e r i z e d i n that the gripping appliance (19) has one or more washers (20) which are threaded onto a piston rod (12) of the piston means (11) and which by the

trigger (6) can be set obliquely such that they are brought to engage the piston rod (12) and transfer the triggering movement of the trigger (6) to the piston rod (12) such that said piston rod (12) is brought to perform its discharge movement.

14. Device according to any preceding claim, c h a r a c t e r i z e d i n that a plurality of stroke setting means (30) having different lengths (L) belong to each discharge device (1), whereby each length (L) of the stroke setting means (30) corresponds with a desired stroke of the piston means (11) and thereby, a desired dose volume of the product (2) to be discharged.

15. Device according to claim 14, c h a r a c t e r i z e d i n

that a plurality of brackets (33) with associated stroke setting means (30) belong to each discharge device (1),

that a stroke setting means (30), belonging to each of said brackets (33), allows another stroke than the stroke setting means (30) belonging to another bracket (33), and

that each bracket (33) has information about the dose volume provided by its stroke setting means (30) during use thereof in the discharge device (1).

16. Device according to claim 14 or 15, c h a r a c t e r i z e d i n that the bracket (33) can be located on the discharge device (1) for indicating the dose volume provided by the discharge device (1) if the stroke setting means (30) of the bracket (33) has been located in the discharge device (1).

17. Device according to any preceding claim, c h a r a c t e r i z e d i n that a return means (17) is provided

to impart to the trigger (6) a return movement (B) which is opposite to the triggering movement (A) and that the retraction means (24) is provided to cooperate with the trigger (6) and the piston means (11) such that when the trigger (6) is brought to perform its return movement by the return means (17), then the piston means (11) is brought to perform its retraction movement.

18. Device according to claim 17, c h a r a c t e r i z e d i n that the retraction means (24) has at least one follower pin (23) or similar and the trigger (6) at least one hole (22) or similar, whereby the follower pin (23) cooperates with edge portions of the hole (22) such that the return means (17) through the trigger, imparts to the retraction means (24) a retraction movement in the retraction direction (R) by affecting the trigger (6) in the return direction.

19. Device according to any preceding claim, c h a r a c t e r i z e d i n that the container (3) with the product (2) consists of a flexible synthetic material and is compressible by the piston means (11) for discharge of the product therefrom.

20. Device according to claim 19, c h a r a c t e r i z e d i n

that those parts of the container (3) having at least one discharge hole, may expand such that the discharge hole is opened and the product (2) let out from the container (3), and

that said parts of the container (3) with the discharge hole may contract for closing the discharge hole after the discharge or outfeed.

21. Device according to claim 19 or 20, c h a r a c - t e r i z e d i n that the container (3) is a plastic bag.